



- Universal AC input / Full range (up to 305VAC)
- · Built-in active PFC function
- Protections: Short circuit / Over current / Over voltage / Over temperature
- Cooling by free air convection
- OCP point adjustable through output cable or internal potentiometer
- IP67 / IP65 design for indoor or outdoor installations
- "UL8750 listed" safety approved for HLG-80H-□BL
- · Class 2 power unit
- Three in one dimming function (1~10Vdc or PWM signal or resistance)
- Suitable for LED lighting and moving sign applications
- · Compliance to worldwide safety regulations for lighting
- Suitable for dry / damp / wet locations
- 5 years warranty (Note.10)













HLG-80H-12A

Blank: IP67 rated. Cable for I/O connection.

A: IP65 rated. Output voltage and constant current level can be adjusted through internal potentiometer.

B: IP67 rated. Constant current level adjustable through output cable with 1~10Vdc or 10V PWM signal or resistance.

BL (option): Contact MEAN WELL for details.

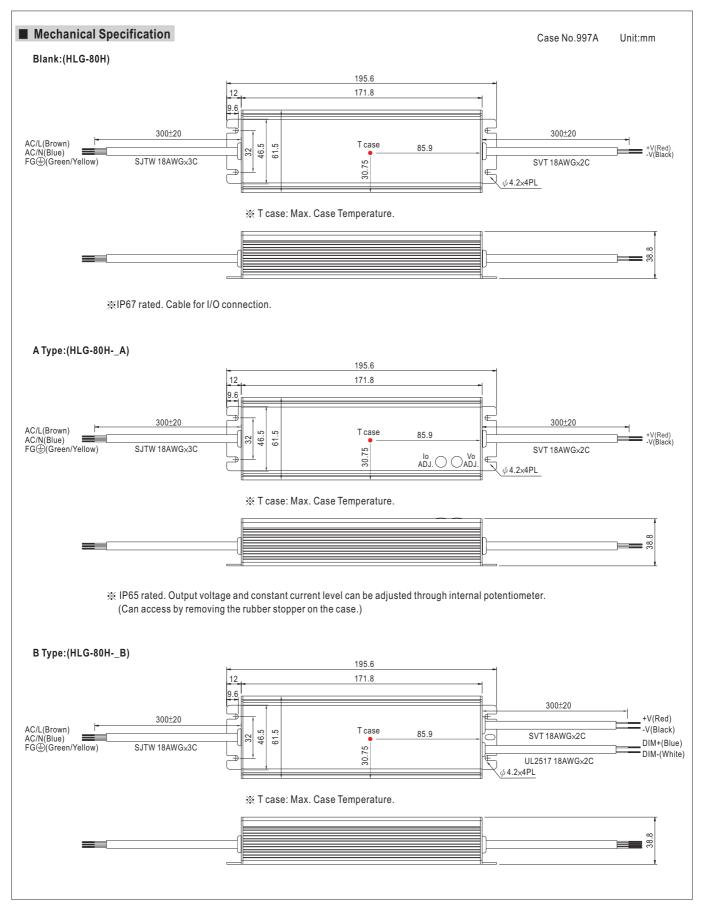
D (option): IP67 rated. Timer dimming function, contact MEAN WELL for details.

SPECIFICATION

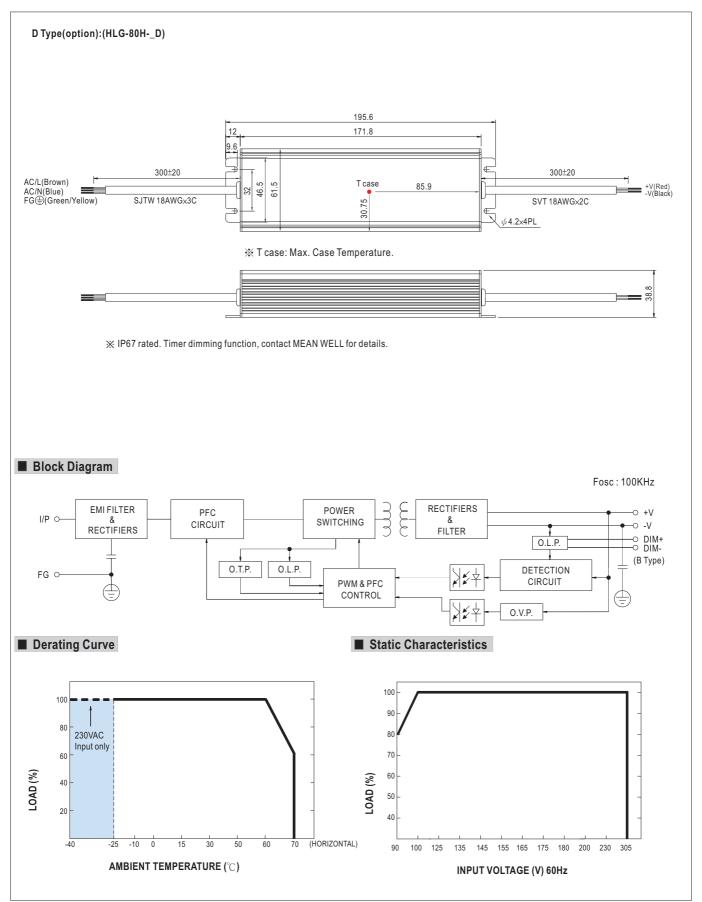
MODEL		HLG-80H-12	HLG-80H-15	HLG-80H-20	HLG-80H-24	HLG-80H-30	HLG-80H-36	HLG-80H-42	HLG-80H-48	HLG-80H-54		
	DC VOLTAGE	12V	15V	20V	24V	30V	36V	42V	48V	54V		
	CONSTANT CURRENT REGION Note.4		9 ~ 15V	12 ~ 20V	14.4 ~ 24V	18 ~ 30V	21.6 ~ 36V	25.2 ~ 42V	28.8 ~ 48V	32.4 ~ 54V		
	RATED CURRENT	5A	5A	4A	3.4A	2.7A	2.3A	1.95A	1.7A	1.5A		
	RATED POWER	60W	75W	80W	81.6W	81W	82.8W	81.9W	81.6W	81W		
	RIPPLE & NOISE (max.) Note.2		150mVp-p	150mVp-p	150mVp-p	200mVp-p	200mVp-p	200mVp-p	200mVp-p	200mVp-p		
	VOLTAGE ADJ. RANGE Note.6		13.5 ~ 17V	17 ~ 22V	22 ~ 27V	27 ~ 33V	33 ~ 40V	38 ~ 46V	43 ~ 53V	49 ~ 58V		
OUTPUT	VOLIAGE ADV. NAMOE Mote.0	Can be adjusted by internal potentiometer A type only										
0011 01	CURRENT ADJ. RANGE	3 ~ 5A	3 ~ 5A	2.4 ~ 4A	2.04 ~ 3.4A	1.62 ~ 2.7A	1.38 ~ 2.3A	1.17 ~ 1.95A	1 02 ~ 1 7A	0.9 ~ 1.5A		
	VOLTAGE TOLERANCE Note.3	±2.5%	±2.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%		
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%		
	LOAD REGULATION	±2.0%	±1.5%	±1.0%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%		
		2000ms, 80ms				0VAC at full loa		1		OVAC / 115VA		
	HOLD UP TIME (Typ.)	16ms at full lo			01110, 0011107 20	0 17 10 41 1411 104	а , в туро 200	omo, zoomo at	00701000 20	, , , , , , , , , , , , , , , , , , ,		
	, ,,,	90 ~ 305VAC	127 ~ 43									
	FREQUENCY RANGE	47 ~ 63Hz	127 43	IVDO								
	POWER FACTOR (Typ.)		/AC DE>0 06/	230\/AC DE>0	04/277\/ΔC at	full load (Pleas	a refer to "Dov	ver Factor Char	ractoristic" cur	(a)		
INPUT	EFFICIENCY (Typ.)	88%	89%	90%	90.5%	91%	91%	91%	91%	91%		
INT O I	AC CURRENT (Typ.)						31/0	31/0	31/0	31/0		
	INRUSH CURRENT (Typ.)	0.85A / 115VAC 0.425A / 230VAC 0.4A / 277VAC COLD START 55A(twidth=485,\(\text{ts}\) measured at 50\(\text{l} \text{peak}\)) at 230VAC										
	LEAKAGE CURRENT	COLD START 30A(twidth=465)/LS Theasured at 50% Ipeak) at 230VAC										
	OVER CURRENT Note.4											
		95 ~ 108% Protection type: Constant current limiting, recovers outcomptically effect fault condition in removed.										
	OLIOPE OIDOUE	Protection type: Constant current limiting, recovers automatically after fault condition is removed Hiccup mode, recovers automatically after fault condition is removed										
	SHORT CIRCUIT	14 ~ 17V	18 ~ 24V	, ,			44 40)/	40 501/	F4 00\/	50 001/		
PROTECTION	OVER VOLTAGE			23 ~ 30V	28 ~ 35V	35 ~ 43V	41 ~ 49V	48 ~ 58V	54 ~ 63V	59 ~ 68V		
	OVER TEMPERATURE	Protection type : Shut down o/p voltage, re-power on to recover 85°C ±10°C (RTH2)										
		Protection type: Shut down o/p voltage, re-power on to recover										
		-40 ~ +70°C (Refer to "Derating Curve")										
	WORKING TEMP.	- '		,								
	WORKING HUMIDITY	20 ~ 95% RH non-condensing										
ENVIRONMENT	STORAGE TEMP., HUMIDITY	-40 ~ +80°C,										
	TEMP. COEFFICIENT	±0.03%/°C (0										
	VIBRATION		<u>.</u>			ong X, Y, Z axe				7		
	SAFETY STANDARDS Note.7	UL8750, CSA C22.2 No. 250.0-08(except for HLG-80H-48/54V & HLG-80H-48/54BL), UL8750 listed for HLG-80H-BL										
		EN61347-1, EN61347-2-13 independent, J61347-1, J61347-2-13, IP65 or IP67 approved; Design refer to UL60950-1, TUV EN60950-										
SAFETY &	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC										
EMC	ISOLATION RESISTANCE	,	-	00M Ohms / 50								
	EMC EMISSION	Compliance to EN55015, EN61000-3-2 Class C (≥60% load) ; EN61000-3-3										
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11, EN61547, EN55024, light industry level (surge 4KV), criteria A										
	MTBF	357.8K hrs min. MIL-HDBK-217F (25℃)										
OTHERS	DIMENSION		3.8mm (L*W*H	,								
	PACKING		s/14.4Kg/0.540			^ -						
NOTE	Ripple & noise are measure Tolerance : includes set up Constant current operation reconfirm special electrical in Derating may be needed ur A type only.	pecially mentioned are measured at 230VAC input, rated load and 25°C of ambient temperature. asured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. et up tolerance, line regulation and load regulation. ation region is within 60% ~100% rated output voltage. This is the suitable operation region for LED related applications, but please rical requirements for some specific system design. ed under low input voltages. Please check the static characteristics for more details. In refer to EN60598-1, CNS15233, GB7000.1, FCC part18.										

- Length of set up time is measured at cold first start. Turning ON/OFF the power supply may lead to increase of the set up time.
 The power supply is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment manufacturers must re-qualify EMC Directive on the complete installation again. 10. Refer to warranty statement



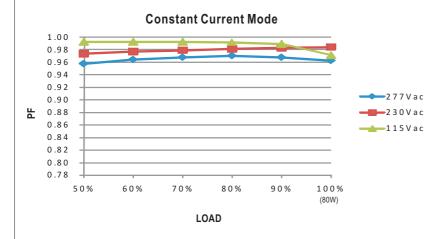






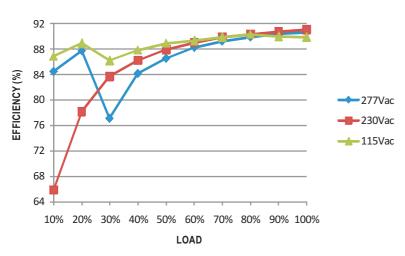


■ Power Factor Characteristic



■ EFFICIENCY vs LOAD (48V Model)

HLG-80H series possess superior working efficiency that up to 91% can be reached in field applications.

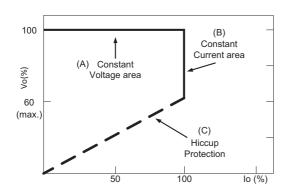


■ DRIVING METHODS OF LED MODULE

There are two major kinds of LED drive method "direct drive" and "with LED driver".

A typical LED power supply may either work in "constant voltage mode (CV) or constant current mode (CC)" to drive the LEDs.

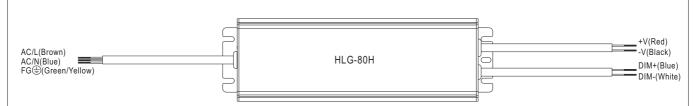
Mean Well's LED power supply with CV+ CC characteristic can be operated at both CV mode [with LED driver, at area (A)] and CC mode [direct drive, at area (B)].



Typical LED power supply I-V curve



■ DIMMING OPERATION



- $\ensuremath{\mathbb{X}}$ Please DO NOT connect "DIM-" to "-V".
- X Reference resistance value for output current adjustment (Typical)

Resistance	Single driver	10K Ω	20K Ω	30Κ $Ω$	40K $Ω$	50 Κ Ω	60K Ω	70K Ω	80 K Ω	90K $Ω$	100K Ω	OPEN	
	value	Multiple drivers (N=driver quantity for synchronized dimming operation)	10KΩ/N	20K Ω/N	30KΩ/N	40KΩ/N	50KΩ/N	60KΩ/N	70KΩ/N	80K Ω/N	90KΩ/N	100KΩ/N	
Pe	rcentage	of rated current	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	102%~108%

※ 1 ~ 10V dimming function for output current adjustment (Typical)

Dimming value	1V	2V	3V	4V	5V	6V	7V	8V	9V	10V	OPEN
Percentage of rated current	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	102%~108%

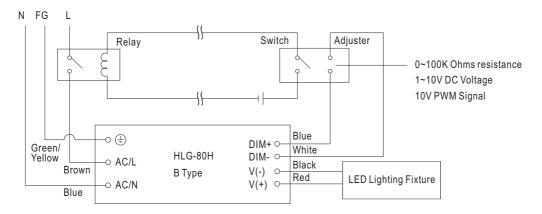
* 10V PWM signal for output current adjustment (Typical): Frequency range:100Hz ~ 3KHz

Duty value	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	OPEN
Percentage of rated current	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	102%~108%

XUsing the built-in dimming function on B-type model can't turn the lighting fixture totally dark. Please refer to the connection method below to achieve 0% brightness of the lighting fixture connecting to the LED power supply unit.

XDirect connecting to LEDs is suggested, but is not suitable for using additional drivers.

Dimming connection diagram for turning the lighting fixture ON/OFF:



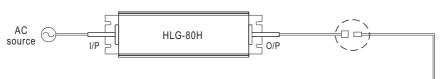
Using a switch and relay can turn ON/OFF the lighting fixture.

- 1.Output constant current level can be adjusted through output cable by connecting a resistance or 1~10Vdc or 10V PWM signal between DIM+ and DIM-.
- 2. The LED lighting fixture can be turned ON/OFF by the switch.



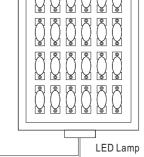
■ WATERPROOF CONNECTION

 $Water proof connector \ can be assembled \ on the output \ cable \ of \ HLG-80H \ to \ operate \ in \ dry/wet/damp \ or \ outdoor \ environment.$

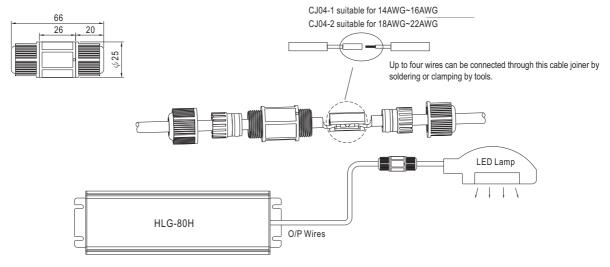


Size	Pin Configuration (Female					
M12	00	000				
IVIIZ	4-PIN	5-PIN				
	5A/PIN	5A/PIN				
Order No.	M12-04	M12-05				
Suitable Current	10A max.	10A max.				

Size	Pin Configuration (Female)
M15	00
IVITO	2-PIN
	12A/PIN
Order No.	M15-02
Suitable Current	12A max.



O Cable Joiner



XCJ04 cable joiner can be purchased independently for user's own assembly. MEAN WELL order No.: CJ04-1, CJ04-2.

O Junction Box(Option)

